

AMENDMENTS TO THE ABSTRACT:

Please delete the abstract and insert the attached substitute abstract after the claims.

A beam steering apparatus including an antenna array having a plurality of antenna elements. The antenna elements are spatially arranged with respect to one another and being operable to receive signals. A plurality of optical modulators, each of which is associated with a different one of the antenna elements and are operable to modulate signals received thereby onto a different respective optical carrier. A plurality of delay units for applying an amount of delay to modulated optical signals passing therethrough in respect of one or more of the antenna elements. A demultiplexer for separating the modulated optical carriers within an optical signal output by the delay units. A demodulator for demodulating the signal received by each antenna element from the respective separated modulated optical carrier. A combiner for combining the demodulated received signals output by the demodulator.